



MOBILITY OIL & GAS

Drilling Fluids Technology

Course Description

This course covers the purpose, functions, properties, and standards used for modern drilling fluid systems.

Course Objectives

Participants will learn how to apply different drilling fluids to drilling wells addressing performance and economics. The course will address the standards used to measure drilling fluid properties. The course will cover the many additives used in drilling fluids and how to select which ones to use to address common drilling problems. The equipment used to build and maintain drilling fluids will be explained.

Who Should Attend

Drilling Engineers, Superintendents, Toolpushers, Geologists, Purchasing Agents. Anyone involved in the selection, daily use, or problems associated with drilling fluids.

Course Contents

Day 1

- Introduction and Terminology
- Functions of a drilling fluid system
- Fluid Types and Applications
- API standards on Drilling Fluids Tests and Procedures
- Mud Weight and Pressure Control

Day 2

- Viscosity and fluid loss measurements
- Additives, Clays and Polymers
- Components and functions of circulation system

Day 3

- Basic pressure drop computations, static and dynamic pressures
- Introduction to kick occurrences, avoidance, importance of mud density
- Solids control and disposal

Day 4

- Drilling problems and solutions related to drilling fluids (Hole cleaning, Stuck pipe, Lost Returns)
- Lubricity, pH & Alkalinity, Contamination etc...



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Day 5

- Engineering calculations
- Health, Safety and the Environment

Continuing Professional Development

35 HOURS CPD